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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,131	06/27/2003	Chi-Yu Ho	10461-US-PA	1130

31561 7590 06/13/2006

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

HOLTON, STEVEN E

ART UNIT PAPER NUMBER

2629

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,131	Applicant(s) HO ET AL.	
	Examiner Steven E. Holton	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 3/15/2006. Claims 1-11 are currently pending in the application. An action follows below:

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Taiwan, R.O.C. on 12/31/2002. It is noted, however, that applicant has not filed a certified copy of the 91137983 application as required by 35 U.S.C. 119(b).

Claim Objections

3. Claims 2 and 3 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The Examiner notes that the amended claim 1 states, "when the metal slice is touched by a user, the display is turned on" and claim 2 recites "when the user touches the metal slice, the display is turned on". Further, claim 1, states, "an the on state is maintained until the metal slice is touched again" and claim 3 states, "wherein when the user touches the metal slice again, the display is turned off." Therefore, the limitations of claims 2 and 3 are fully covered by the limitations amended to claim 1 and do not further limit the parent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta (USPgpPub: 2002/0163524) in view of Adelson et al. (USPN: 3530312), hereinafter Adelson, and further in view of Metroka et al. (USPN: 4845772), hereinafter Metroka.

Regarding claim 1, Dutta discloses a handheld electronic device with "a display (Fig. 1, element 101; paragraph 23), comprising a backlight (paragraph 23; The examiner notes that Dutta does not show the backlight, but a backlight is part of the device, otherwise the backlight switch wouldn't be necessary)." However, Dutta does not disclose "a metal slice, located on the surface of the hand-held apparatus, wherein when a user touches the metal slice, the metal slice generates an AC signal; and

A control circuit, coupled to the metal slice, used to convert the AC signal into a DC pulse signal so as to control the hand-held apparatus based on the DC pulse signal."

Adelson discloses a touch responsive circuit that functions using "an antenna element comprising a body portion of the electrically conductive material which can assume many shapes, forms a touch responsive element (col. 3, lines 6-9; Fig. 1, element 5)". The Examiner notes that the antenna could be a metal slice or panel on

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the surface of a device. Further, when the antenna is touched; an AC is coupled through the human body to the rest of the circuit for use as a switch signal (col. 4, lines 25-65).

At the time of invention it would have been obvious to one skilled in the art to utilize touch switches of Adelson as a type of switch used for controlling the hand-held device of Dutta. The motivation for doing so would have been "to provide a construction of electronic switch which has no moving parts, and an indefinitely long operating lifetime... the switch has a switching time in the microsecond range (Adelson, col. 2, lines 32-38)." The Examiner notes that the output of the Adelson circuit is shown as being a both half-rectified and fully-rectified (Figs. 3 and 4), but Adelson does not discussed changing the signals to DC pulse signals. However, it would have been obvious to one skilled in the art that a microprocessor operates with DC signal inputs and that conversion of the AC signal output by Adelson's switch to a DC signal for use with a microprocessor would be possible.

However, neither Adelson nor Dutta disclose "wherein when the metal slice is touched by a user, the display is turned on and the on state is maintained until the metal slice is touched again."

Metroka discloses a portable telephone utilizing a momentary switch for turning the power to the portable telephone on and off (col. 3, lines 55-57). Further, the device operates in an on state until the portable telephone is open and the momentary switch is pressed again (Fig. 10; col. 7, lines 6-19).

At the time of invention it would have been obvious to one skilled in the art to combine the teachings of Dutta, Adelson and Metroka. Using the power on/off system of Metroka a portable device could be turned on and off using the momentary switch described by Adelson and then stay in an on or off state until the momentary switch was touched again. The motivation for using the on/off techniques of Metroka would be to provide a device that could be turned on and maintain the on state until a user desired to turn it off. Using the system described by Metroka would be one design choice for such a device. Thus, it would have been obvious to one skilled in the art to combine the teachings of Dutta, Adelson and Metroka to produce the device as described in claim 1.

Regarding claims 2 and 3, the Examiner takes Official Notice that it is old and well known to provide a switch to turn a display on and off for the user of a handheld device to manipulate. It would have been obvious to one skilled in the art to provide a switch such as Adelson's on a handheld device so that a user could turn the display device on or off by manipulating the button.

Regarding claims 4 and 5, Dutta discloses a physical button on the handheld device for turning the backlight on and off (Fig. 1, element 104; paragraph 23). Thus, it would have been obvious for one skilled in the art to use a touch sensitive switch such as Adelson's as the backlight control switch as disclosed by Dutta.

Regarding claims 6 and 7, the Examiner takes Official Notice, that it is well known in the art to provide a keyboard lock switch on handheld and portable devices so that when unauthorized users are not allowed to enter text on the device or that keyboard input will be ignored when the device is not being operated and is being

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carried. Such a locking mechanism for the keyboard of a handheld device is done using a switch on the handheld device. Thus, it would have been obvious for one skilled in the art to use the switch of Adelson as a switch to operate the locking and unlocking of the keyboard of a handheld device.

Regarding claim 8, Adelson discloses a rectifier used to rectify the AC signal and output a rectified signal (Figs. 4 and 5, element 13 and element 8; col. 3, lines 56-71 and col. 4, line 67-col. 5, line 9). Adelson does not expressly disclose an amplifier, filter or microprocessor, but the amplification and filtering of an AC signal for use with a microprocessor is known in the art and would be an obvious choice by one skilled in the art to increase the level of the sensed signal and to remove noise from the signal for better operation of the overall circuit. Dutta discloses a microprocessor that is used to operate the handheld device (Fig. 2, element 201; paragraph 24).

Regarding claims 9-11, Dutta discloses a backlight control for a handheld personal digital assistant. The Examiner states that mobile phones, personal digital assistants and handheld computers are analogous within the art and that it would be obvious to one skilled in the art that the backlight control functions and other controls provided by Dutta could be interchangeably provided to a mobile phone or hand-held computer.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

The Examiner notes that the arguments are directed towards holding an on or off stated between touches to the switch. Adelson discloses a momentary switch that is on when touched by a user and off when not touched by a user. The Examiner notes that it is known to one skilled in the art to utilize momentary switches as a toggle for changing the state of a device and maintaining the state of the device between touches. Such a technique is described by Metroka where a momentary switch is used to toggle on and off states, but the on or off state is maintained while waiting for a valid input to the momentary switch. It would be obvious that the same maintain state could be used with any type of momentary switch including a momentary touch switch as described by Adelson. From there it is merely a matter of design choice to decide to use a touch sensitive momentary switch or other momentary contact switch to turn on and off the power or any other component of a cellular telephone or personal digital assistant.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton
Division 2629
June 11, 2006



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